

SECOND EDITION

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# HOW TO STUDY AND PRACTISE

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# CALES AND ARPEGGIOS

A NEW AND PRACTICAL METHOD OF ALL MAJOR AND MINOR  
SCALES AND ARPEGGIOS FOR THE PIANO AND ORGAN.

BY

Edward Schubert



1880

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IN CONNECTION WITH THE STUDY OF THIS WORK, EVERY STUDENT SHOULD USE THE  
CONDENSED FORM OF FINGERING, ENTITLED:

FINGERING OF ALL MAJOR AND MINOR SCALES  
"IN A NUTSHELL"

IT IS A VALUABLE ASSISTANCE IN TEACHING PUPILS TO  
COMPARE THE NOTATION WITH THE FINGERING

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## P R E F A C E .

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THE great objection that so many pupils of the piano have to scale practise gave rise to this novel, interesting and thorough method of studying and practising scales. Every pupil should understand the purpose and have a thorough knowledge of the scales, before attempting their practise. Most pupils receive several pages of notes for scale practice, that frighten, confuse and discourage them. After struggling with the fingering, notes and signature for a time, the majority give up in despair. Scales, correctly taught, become an interesting study, and there is no reason for these difficulties. By this method of scale study and practise, the reader will soon realize that notes are superfluous and confusing. A thorough knowledge of the construction of the scale and its fingering must precede its practise. The name of the scale should be sufficient to determine the notes belonging to the key or scale, as the notes follow in alphabetic rotation. The practise of the scale should not be attempted before making a study of this rotation according to the rule of whole and half tones; in order to determine its signature. The author having learned by years of practical experience in teaching, that something should be done to relieve this general scale difficulty, has devised a method by which scales become interesting to every pupil. Even the beginner will succeed and understand the great practical and theoretical value of the scales. This method is used with marked success and it is hoped that this little work will prove to be an assistance to the teacher and pupil.



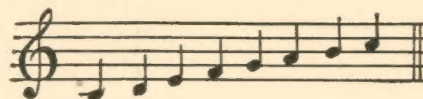
# SCALES.

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The notes or tones in music move in three different ways only.

1st—In regular alphabetic order, as follows:

C D E F G A B, etc.



Scale movement

2nd—By skips. For example: C E G, etc.



Arpeggio movement

3d—A number of notes played together



Chord movement

The scales are the foundation of all thorough music study, theoretical and practical. Scale movement is most important because the notes move in regular alphabetic order, and the notes for the other movements (arpeggio and chord) are selected from, and based upon the scales. Scale movement is preferable in harmony and counterpoint. Every scale represents a different harmony. These harmonies differ to the ear, as colors differ to the eye. The importance of understanding these tone colors in music may be well realized, if compared with the colors in art. How could we appreciate the beauty of a painting without a knowledge of the colors? (It is advisable for the teacher to play the scales in all the keys with a few chords, so that the pupil may realize the various harmonies.) In a practical way, the scales teach us the arrangement of the fingers for the various groups of notes as they occur in the composition.

A scale is a succession of tones proceeding alphabetically from any note to its octave.

There are three species of scales, Major, Minor and Chromatic. Major means great, Minor—less, Chromatic—progressing by half tones. In the first or natural major scale (C major) there is a sound between all notes excepting the 3d and 4th (e and f,) and 7th and 8th (b and c.) For this reason there is no black key between e and f—and—b and c.

All major scales are arranged in similar manner, for which purpose sharps and flats are used. There are twelve major scales. The following scale is obtained by counting upward 5 notes in alphabetic order from the first tone of every scale. Every scale is named after the note with which it begins. The rotation of major scales is as follows:

C major—Natural.

G “ 1 # (f # used to avoid the sound between the 7th and 8th tones.

D “ 2 # (f and c # used to avoid the sound between the 7th and 8th—and—3d and 4th.

A “ 3 # (f e and g #) The f sharp is retained to have a sound between the 5th and 6th.

E “ 4 # (f e g and d #) Study the signature of every scale as indicated above.

B “ 5 # (f e g d and a #)

F # “ 6 # (f e g d a and e #) G flat major with 6 flats is the same as F sharp major, the notation only is changed from sharps to flats (g d a e b and c flats.)



## SCALES—Continued.

- D♭ major 5♭ (d e g a and b ♭) Sometimes D flat major appears as C sharp major with 7 sharps; the only difference is in the notation (c d e f g a and b sharps.)
- A♭ " 4♭ (d e a and b ♭) In this scale g is made natural to avoid the sound between 7 and 8, leaving only 4 flats; in E flat major 3 flats, etc.
- E♭ " 3♭ (e a and b ♭)
- B♭ " 2♭ (e and b ♭)
- F " 1♭ (b ♭)

All the notes in any scale taken collectively are called "key," thus the notes belonging to the natural scale of C major are termed—Key of C, etc. Every note of the scale has a technical name as follows:

- 1st note — Tonic, key note or Final. (The note upon which the scale or key is based.)
- 2nd " — Super-tonic. (Next ABOVE the tonic.)
- 3rd " — Mediant. (Midway between the tonic and dominant.)
- 4th " — Sub-dominant. (A fifth UNDER the Tonic, also the note UNDER the Dom.)
- 5th " — Dominant. (Governing and influencing the harmony.)
- 6th " — Sub-mediante. (Midway between Sub-dom. and Tonic.)
- 7th " — Leading note or Sub-tonic. (Leading to the octave and being the note next below the Tonic)
- 8th " — Octave. (The distance from 1 to 8.)

Notes are superfluous in scale practise and often confuse young pupils. (It is understood that every one taking up the scales is acquainted with the rudiments of music and the key board.) The name of the scale is sufficient, as the notes follow in regular alphabetic rotation. The signature depends entirely upon the note upon which the scale is based, according to the rule given:

There must be a sound between all notes excepting the 3d and 4th—and—7th and 8th. There is no other instrument upon which the construction of the scales or keys is so clearly mapped out before us, as the key board of the piano or organ. The white keys for the natural notes, and the black keys for the sounds that lie between them.

No scale should be practised before it is thoroughly analyzed.

The fingering in the scales should be thought of as "groups" of fingers, and not as a succession of single fingers. In the diagram the red figures indicate the groups of fingers; the small black figures indicate those fingers belonging to the group. The red figure 3 for example refers to the 1st, 2nd and 3d or 3rd 2nd and 1st fingers. Always count *from* the 1st (thumb) or *to* the 1st finger; except stated otherwise. Study the signature and certify the fingering of every scale before attempting to practise it. The fingers have no brains; we must control and lead them mentally.

### GENERAL REMARKS.

- (a) Follow the red figures, and read small figures in each bracket or group, as you would in glancing at an entire word instead of single letters.
- (b) A most valuable assistance in learning to read at sight, by overcoming the habit of looking at the key-board and fingers, and gaining independence between fingers keys and notes. It impresses the key-board upon the mind and sharpens the imagination of seeing the key-board mentally. (By seeing a picture we may imagine the surroundings more, than by reading only.)
- (c) The spaces with red figures between brackets or groups of fingers, act as a signal to remind the pupil of the change of fingering.
- (d) Always place the fingers in position on their respective keys after changing from one group to another and keep the hand quiet.
- (e) It is an illustration of every scale as it appears on the key board and the eyes should be fixed on the picture of the keys while playing the scale; not on the fingers.
- (f) Follow the notes mentally that stand for the keys of the scale, according to the position of the key that the scale begins with. In reading music, the keys are located according to the notes; in this work the notes are located according to the keys, assisting materially in sight reading.



## ARPEGGIO.

♩ ♪ ♪

Arpe—(Italian) The harp.

Arpeggi — (Italian) } In harp style. On the harp, the notes of the chords are generally played in quick succession hence an "Arpeggio"  
 Arpeggio— " } is a broken chord, or the notes of a chord played in succession, instead of being played together. The  
 Arpegement—(French) } primary or principal arpeggio is composed of the 1st, 3d and 5th tones of every scale. For example in C major.

C	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D
1st tone		3d tone		5th tone			1st or 8va		3d tone		5th tone			1st tone, etc.	

## DOMINANT 7<sup>TH</sup> ARPEGGIO.

The dominant 7th arpeggio is based upon the 5th (dominant) tone of every scale, to which is added the 3d, 5th and 7th. For example in C major:

				5th tone											
C	D	E	F	G	A	B	C	D	E	F	G	A	B	C	D
				1st		3d		5th		7th		1st		3d, etc.	

## DIMINISHED 7<sup>TH</sup> ARPEGGIO.

The diminished 7th arpeggio is based upon the 7th (diminished) tone of every scale, to which is added the 3d, 5th and 7th. In the diminished 7th chord the intervals are minor, for which purpose the 7th (4th note of the arpeggio) is made a half tone lower. For example in C major:

						7th tone									
C	D	E	F	G	A	B	C	D	E	F	G	A <sup>b</sup>	B	C	D
						1st		3rd		5th		7th		1st, etc.	



Never use the thumb on a black key (sharp or flat) in any scale.)

	C	D	E	F	G	A	B	C	D	E	F	G	A	B	C				
RIGHT	3	1	2	3	4	1	2	3	4	3	1	2	3	5	1	2	3	4	5
LEFT (8va lower)	5	5	4	3	2	1	3	3	2	1	4	4	3	2	1	3	3	2	1

Ascending (In playing the scale descending read figures backward) Descending.  
 Practise hands separately before playing together. Remember fingering by groups, indicated by red figures. Separate fingers are indicated by small figures 1 2 3 4 5.

**C Major Arpeggio.** (The figures indicate the separate fingers as used on the notes of the arpeggio.)

RIGHT	1	2	3	1	2	3	5
	C	E	G	C	E	G	C
LEFT	5	4	2	1	4	2	1

(The blank spaces show the keys that are omitted or skipped.)

**Dominant 7th Arpeggio.** (Based upon g. the 5th note of C major scale.) (See definition on preceeding page.)

RIGHT	1	2	3	4	1	2	3	4	5
	G	B	D	F	G	B	D	F	G

LEFT	5	4	3	2	1	4	3	2	1
------	---	---	---	---	---	---	---	---	---

**Diminished 7th Arpeggio.** (Based upon b. the 7th tone of C major scale.) (See definition on preceeding page.)

RIGHT	1	2	3	4	1	2	3	4	5
	B	D	F	A <sup>b</sup>	B	D	F	A <sup>b</sup>	B

LEFT	5	4	3	2	1	4	3	2	1
------	---	---	---	---	---	---	---	---	---



# G MAJOR. (1 sharp)

9

Never use the thumb on a black key (sharp or flat) in any scale.)

RIGHT **3** 1 2 3 **4** 1 2 3 4 **3** 1 2 3 **5** 1 2 3 4 5

LEFT (5va lower) **5** 5 4 3 2 1 **3** 3 2 1 **4** 4 3 2 1 **3** 3 2 1

## G Major Arpeggio.

RIGHT 1 2 3 1 2 3 5

LEFT 5 4 2 1 4 2 1

G B D G B D G

## Dominant 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

LEFT 5 4 3 2 1 4 3 2 1

D F# A C D F# A C D

## Diminished 7th Arpeggio.

RIGHT 3 1 2 3 4 1 2 3 4

LEFT 3 2 1 4 3 2 1 4 3

F# A C E D F# A C E D F#



## D MAJOR. (2 sharps)

Never use the thumb on a black key (sharp or flat) in any scale.

RIGHT 3 1 2 3 4 1 2 3 4 3 1 2 3 5 1 2 3 4 5

LEFT 5 5 4 3 2 1 3 3 2 1 4 4 3 2 1 3 3 2 1

(8va lower)

## D Major Arpeggio.

RIGHT 1 2 3 1 2 3 5

D F# A C D F# A C D

LEFT 5 3 2 1 3 2 1

## Dominant 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

A C# E G A C# E G A

LEFT 5 4 3 2 1 4 3 2 1

## Diminished 7th Arpeggio.

RIGHT 3 1 2 3 4 1 2 3 4

C# E G Bb C# E G Bb C#

LEFT 3 2 1 4 3 2 1 4 3



# A MAJOR. (3 sharps)

11

Never use the thumb on a black key (sharp or flat) in any scale.

RIGHT	3	1	2	3	4	1	2	3	4	3	1	2	3	5	1	2	3	4	5
LEFT (8va lower)	5	4	3	2	1	3	3	2	1	4	4	3	2	1	3	3	2	1	

## A Major Arpeggio.

RIGHT	1	2	3	1	2	3	5
	A	C#	E	A	C#	E	A
LEFT	5	3	2	1	3	2	1

## Dominant 7th Arpeggio.

RIGHT	1	2	3	4	1	2	3	4	5
	E	G#	B	D	E	G#	B	D	E
LEFT	5	4	3	2	1	4	3	2	1

## Diminished 7th Arpeggio.

RIGHT	3	1	2	3	4	1	2	3	4
	G#	B	D	F#	G#	B	D	F#	G#
LEFT	4	3	2	1	4	3	2	1	4



## E MAJOR. (4 sharps)

Never use the thumb on a black key (sharp or flat) in any scale.

**RIGHT** 3 1 2 3 4 1 2 3 4 3 1 2 3 5 1 2 3 4 5

**LEFT** (8va lower) 5 5 4 3 2 1 3 3 2 1 4 4 3 2 1 3 3 2 1

## E Major Arpeggio.

**RIGHT** 1 2 3 1 2 3 5

E G# B E G# B E

**LEFT** 5 3 2 1 3 2 1

## Dominant 7th Arpeggio.

**RIGHT** 1 2 3 4 1 2 3 4 5

B D# F# A B D# F# A B

**LEFT** 5 4 3 2 1 4 3 2 1

## Diminished 7th Arpeggio.

**RIGHT** 2 3 1 2 3 4 1 2 3

D# F# A C# D# F# A C# D#

**LEFT** 4 3 2 1 4 3 2 1 4



# B MAJOR. (5 sharps)

13

Never use the thumb on a black key (sharp or flat) in any scale.

RIGHT 3 1 2 3 4 1 2 3 4 3 1 2 3 5 1 2 3 4 5

LEFT (8va lower) 4 4 3 2 1 4 4 3 2 1 3 3 2 1 4 4 3 2 1

In B major all the black keys are used; the thumb comes on e and b natural in both hands.

## B Major Arpeggio.

RIGHT 1 2 3 1 2 3 5

LEFT 5 3 2 1 3 2 1

## Dominant 7th Arpeggio.

RIGHT 2 3 4 1 2 3 4 1 3

LEFT 4 3 2 1 4 3 2 1 4

## Diminished 7th Arpeggio.

RIGHT 2 3 1 2 3 4 1 2 3

LEFT 4 3 2 1 4 3 2 1 4



## F SHARP MAJOR. (6 sharps)

Never use the thumb on a black key (sharp or flat) in any scale.

	G <sup>b</sup> F <sup>#</sup>	A <sup>b</sup> G <sup>#</sup>	B <sup>b</sup> A <sup>#</sup>		D <sup>b</sup> C <sup>#</sup>	E <sup>b</sup> D <sup>#</sup>		G <sup>b</sup> F <sup>#</sup>	A <sup>b</sup> G <sup>#</sup>	B <sup>b</sup> A <sup>#</sup>		D <sup>b</sup> C <sup>#</sup>	E <sup>b</sup> D <sup>#</sup>		G <sup>b</sup> F <sup>#</sup>
				C <sup>b</sup> B				F <sup>#</sup> E <sup>#</sup>			C <sup>b</sup> B				F <sup>#</sup> E <sup>#</sup>
RIGHT	3	2	3	4	3	1	2	3	4	5	1	2	3	4	5
LEFT (8va lower)	4	4	3	2	1	3	3	2	1	4	4	3	2	1	3

In F<sup>#</sup> major the thumbs come on b and e<sup>#</sup> in both hands.

(F<sup>#</sup> major is the same as G<sup>b</sup> major—see definition to major scales.)

## F Sharp Major Arpeggio.

RIGHT	1	2	3	1	2	3	5
	F <sup>#</sup>	A <sup>#</sup>	C <sup>#</sup>	F <sup>#</sup>	A <sup>#</sup>	C <sup>#</sup>	F <sup>#</sup>
LEFT	5	4	2	1	4	2	1

(This arpeggio consist of black keys only.)

## Dominant 7th Arpeggio.

RIGHT	3	1	2	3	4	1	2	3	4
	C <sup>#</sup>	E <sup>#</sup>	G <sup>#</sup>	B	C <sup>#</sup>	E <sup>#</sup>	G <sup>#</sup>	B	C <sup>#</sup>
LEFT	3	1	4	3	2	1	4	3	2

## Diminished 7th Arpeggio.

RIGHT	1	2	3	4	1	2	3	4	5
	E <sup>#</sup>	G <sup>#</sup>	B	D <sup>#</sup>	E <sup>#</sup>	G <sup>#</sup>	B	D <sup>#</sup>	E <sup>#</sup>
LEFT	5	4	3	2	1	4	3	2	1



# D FLAT MAJOR. (5 flats)

15

Never use the thumb on a black key (sharp or flat) in any scale.

	C# D♭	D# E♭		F# G♭	G# A♭	A# B♭		C# D♭	D# E♭		F# G♭	G# A♭	A# B♭		C# D♭	
				E# F				B# C			E# F				B# C	
RIGHT	2	3	4	1	2	3	4	3	1	2	3	4	2	1	2	
LEFT (8va lower)	3	2	1	4	4	3	2	1	3	3	2	1	4	4	3	2

In D♭ major the thumbs come on f and c ♯ in both hands.

(D♭ major is the same as C# major—see definition to major scales.)

## D Flat Major Arpeggio.

RIGHT	3	1	2	4	1	2	4
	D♭	F	A♭	D♭	F	A♭	D♭

LEFT	3	1	4	2	1	4	2
------	---	---	---	---	---	---	---

## Dominant 7th Arpeggio.

RIGHT	3	1	2	3	4	1	2	3	4
	A♭	C	E♭	G♭	A♭	C	E♭	G♭	A♭

LEFT	3	1	4	3	2	1	4	3	2
------	---	---	---	---	---	---	---	---	---

## Diminished 7th Arpeggio.

RIGHT	1	2	3	4	1	2	3	4	5
	C	E♭	G♭	B♭♭	C	E♭	G♭	B♭♭	C

LEFT	5	4	3	2	1	4	3	2	1
------	---	---	---	---	---	---	---	---	---



## A FLAT MAJOR. (4 flats)

Never use the thumb on a black key (sharp or flat) in any scale.

RIGHT 2 2 3 3 1 2 3 4 3 1 2 3 3 1 2 3

LEFT (8va lower) 3 3 2 1 4 4 3 2 1 3 3 2 1 4 4 3 2 1 1 3

## A Flat Major Arpeggio.

RIGHT 3 1 2 4 1 2 4

	A $\flat$		C		E $\flat$			A $\flat$		C		E $\flat$			A $\flat$
--	-----------	--	---	--	-----------	--	--	-----------	--	---	--	-----------	--	--	-----------

LEFT 3 1 4 2 1 4 2

## Dominant 7th Arpeggio.

RIGHT 3 1 2 3 4 1 2 3 4

	E $\flat$		G		B $\flat$		D $\flat$	E $\flat$		G		B $\flat$		D $\flat$	E $\flat$
--	-----------	--	---	--	-----------	--	-----------	-----------	--	---	--	-----------	--	-----------	-----------

LEFT 3 1 4 3 2 1 4 3 2

## Diminished 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

	G		B $\flat$		D $\flat$		F $\flat$	G		B $\flat$		D $\flat$		F $\flat$	G
--	---	--	-----------	--	-----------	--	-----------	---	--	-----------	--	-----------	--	-----------	---

LEFT 5 4 3 2 1 4 3 2 1



# E FLAT MAJOR. (3 flats)

17

Never use the thumb on a black key (sharp or flat) in any scale.

RIGHT 1 3 4 1 2 3 4 3 1 2 3 4 3 1 2 3

LEFT 3 3 2 1 4 4 3 2 1 3 3 2 1 4 4 3 2 1 1 3

(8va lower)

## E Flat Major Arpeggio.

RIGHT 3 1 2 4 1 2 4

LEFT 3 1 4 2 1 4 2

E♭ G B♭ E♭ G B♭ E♭

## Dominant 7th Arpeggio.

RIGHT 3 1 2 3 4 1 2 3 4

LEFT 3 2 1 4 3 2 1 4 3

B♭ D F A♭ B♭ D F A♭ B♭

## Diminished 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

LEFT 5 4 3 2 1 4 3 2 1

D F A♭ C♭ D F A♭ C♭ D



## B FLAT MAJOR. (2 flats)

Never use the thumb on a black key (sharp or flat) in any scale.

RIGHT 1 3 3 1 2 3 4 3 1 2 3 4 1 2 3 4

LEFT 3 3 2 1 4 4 3 2 1 3 3 2 1 4 4 3 2 1 1 3

(8va lower)

## B Flat Major Arpeggio.

RIGHT 3 1 2 3 1 2 3

LEFT 3 2 1 3 2 1 3

B $\flat$  D F B $\flat$  D F B $\flat$

## Dominant 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

LEFT 5 4 3 2 1 4 3 2 1

F A C E $\flat$  F A C E $\flat$  F

## Diminished 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

LEFT 5 4 3 2 1 4 3 2 1

A C E $\flat$  G $\flat$  A C E $\flat$  G $\flat$  A

Never use the thumb on a black key (sharp or flat) in any scale.)

RIGHT 4 1 2 3 4 3 1 2 3 4 4 1 2 3 4 4

LEFT 5 5 4 3 2 1 3 3 2 1 4 4 3 2 1 3 3 2 1

(In F major the thumb comes on f and c in both hands.)

### F Major Arpeggio.

RIGHT 1 2 3 1 2 3 5

LEFT 5 4 2 1 4 2 1

F A C F A C F

### Dominant 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

LEFT 5 4 3 2 1 4 3 2 1

C E G Bb C E G Bb C

### Diminished 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

LEFT 5 4 3 2 1 4 3 2 1

E G Bb Db E G Bb Db E



## MINOR SCALES.

\* \* \* \*

Every major scale has a relative minor scale, which is based upon the 6th tone of the major scale or on the 3d tone below its key-note. For example the relative minor to C major is A minor, A being the 6th tone of the C major scale or the 3d note below its key-note. It is termed "relative" because it bears the same signature as the major scale to which it belongs. (See diagram of minor scales.) This species of scale is called "minor" (less or small) because the 3d tone of every minor scale is a half tone (one key) lower than the 3d tone in the major scale beginning on the same note. For example:

In C major the 3rd tone is e  $\sharp$ .

In C minor the 3rd tone is e  $\flat$ .

In A major the 3rd tone is c  $\sharp$ .

In A minor the 3rd tone is c  $\sharp$ , etc.

This gives the minor scale its character or minor effect. The arrangement of whole and half tones also differs in the minor scale as will be seen in the various forms. The minor scale is played in four different ways: Harmonic, Melodic, Natural and Combined.

Diagram of "minor" scales as related to the major:

A minor, Natural, relative to C major.

E	"	1	$\sharp$	"	"	G	"
B	"	2	$\sharp$	"	"	D	"
F $\sharp$	"	3	$\sharp$	"	"	A	"
C $\sharp$	"	4	$\sharp$	"	"	E	"
G $\sharp$	"	5	$\sharp$	"	"	B	"
D $\sharp$	"	6	$\sharp$	"	"	F $\sharp$	"

B  $\flat$  minor, 5  $\flat$ , relative to D  $\flat$  major.

F	"	4	$\flat$	"	"	A $\flat$	"
C	"	3	$\flat$	"	"	E $\flat$	"
G	"	2	$\flat$	"	"	B $\flat$	"
D	"	1	$\flat$	"	"	F	"



# A MINOR (Relative to C Major) Harmonic form.

21

Never use the thumb on a black key (sharp or flat) in any scale.)

	A	B	C	D	E	F	G#	A	B	C	D	E	F	G#	A				
RIGHT	3	1	2	3	4	1	2	3	4	3	1	2	3	5	1	2	3	4	5
LEFT (8va lower)	5	5	4	3	2	1	3	3	2	1	4	4	3	2	1	3	3	2	1

The minor scale is played "harmonic" by raising the 7th tone of the scale a half step (one key on the piano), or making it a half tone higher (sharp), in ascending and descending. This will give us a sound between all notes excepting the 2nd and 3d—and—7th and 8th, while there will be two sounds between the 6th and 7th.

A scale without a "leading tone" is considered unsatisfactory. In the modern system of *harmony*, much depends upon the 7th or leading tone and its relation to other notes of the scale. It is therefore customary to raise the 7th note of the minor scale a half tone, by an accidental, to obtain a true leading tone, and it termed "Harmonic" form.



## A MINOR (Melodic Form.)

Never use the thumb on a black key (sharp or flat) in any scale.)

RIGHT **3** 1 2 3 **4** 1 2 3 4 **3** 1 2 3 **5** 1 2 3 4 5

LEFT (8va lower) **5** 5 4 3 2 1 **3** 3 2 1 **4** 4 3 2 1 **3** 3 2 1

Ascending: F# G#

Descending: F G

The minor scale is played "Melodic" by raising the 6th and 7th tones a half step (or one key on the piano) in ascending only. In this scale we find a sound between all notes excepting the 2nd and 3rd—and—7th and 8th in ascending and the 5th and 6th in descending.

In order to avoid the large interval of a tone and a half, F to G sharp, the 6th tone (F) is raised a half tone in ascending. In descending there is no requirement of a leading "note" and the 7th note is restored to its natural position, which causes the 6th note to become natural also. This changed order of notes makes the scale "melodic."

# A MINOR (Natural Form)

23

Never use the thumb on a black key (sharp or flat) in any scale.)

	A	B	C	D	E	F	G	A	B	C	D	E	F	G	A				
RIGHT	3	1	2	3	4	1	2	3	4	3	1	2	3	5	1	2	3	4	5
LEFT (8va lower)	5	4	3	2	1	3	3	2	1	4	4	3	2	1	3	3	2	1	

The "Natural" form of minor scale is played strictly according to the signature of the scale only. In this form there is a sound between all notes excepting the 2nd and 3d—and—5th and 6th.

The "Natural" form of minor scale, played according to the signature of its relative major only, is the old form. It will be observed that the g in the Natural form of A Minor does not suggest the progression to the 8va; and to modern ears the termination g to a is not as satisfactory as that from b to c in C major. There is no leading tone in this *old* form of minor scale.



## A MINOR (Combined Form.)

Never use the thumb on a black key (sharp or flat) in any scale.

RIGHT **3** 1 2 3 **4** 1 2 3 4 **3** 1 2 3 **5** 1 2 3 4 5

LEFT **5** 5 4 3 2 1 **3** 3 2 1 **4** 4 3 2 1 **3** 3 2 1

(In ASCENDING play f# and g# in DESCENDING g# and f#.) In the "Combined" form play upward "melodic" and downward "harmonic" according to rules given. It will be observed that the half tones (notes that have no sound between) occur between different degrees in each form of minor scale. The most practical form is the "combined" way of playing; but it is advisable to practise the minor scales in all the different forms. The following minor scales are in the "combined" form.

## A Minor Arpeggio.

RIGHT 1 2 3 1 2 3 5

A		C		E		A		C		E		A
---	--	---	--	---	--	---	--	---	--	---	--	---

LEFT 5 4 2 1 4 2 1

**Dominant 7th Arpeggio.** The dominant and diminished 7th arpeggios are the same in A minor as in A major.

RIGHT 1 2 3 4 1 2 3 4 5

E		G#		B		D		E		G#		B		D		E
---	--	----	--	---	--	---	--	---	--	----	--	---	--	---	--	---

LEFT 5 4 3 2 1 4 3 2 1

**Diminished 7th Arpeggio.**

RIGHT 3 1 2 3 4 1 2 3 4

G#		B		D		F#		G#		B		D		F#		G#
----	--	---	--	---	--	----	--	----	--	---	--	---	--	----	--	----

LEFT 4 3 2 1 4 3 2 1 4

# E MINOR (Combined Form.)

25

Never use the thumb on a black key (sharp or flat) in any scale.

RIGHT	3	1	2	3	4	1	2	3	4	3	1	2	3	5	1	2	3	4	5
LEFT	5	5	4	3	2	1	3	3	2	1	4	4	3	2	1	3	3	2	1

(Play  $c^\sharp$  in ascending and  $c^\flat$  in descending.)

## E Minor Arpeggio.

RIGHT	1	2	3	1	2	3	5
	E	G	B	E	G	B	E
LEFT	5	4	2	1	4	2	1

## Dominant 7th Arpeggio.

RIGHT	1	2	3	4	1	2	3	4	5
	B	D#	F#	A	B	D#	F#	A	B
LEFT	5	4	3	2	1	4	3	2	1

## Diminished 7th Arpeggio.

RIGHT	2	3	1	2	3	4	1	2	3
	D#	F#	A	C#	D#	F#	A	C#	D#
LEFT	4	3	2	1	4	3	2	1	4



## B MINOR. (2 sharps)

Never use the thumb on a black key (sharp or flat) in any scale.

		C#		F#	G#	A#		C#		F#	G#	A#	
					Ascend.						Ascend.		
	B	D	E	G		B	D	E	G		B	D	E
RIGHT	3	1	2 3	4	1	2 3	4	3	1	2 3	5	1	2 3
LEFT	4	4	3 2	1	4	4	3 2	1	3	3 2	1	4	4

(Play g# in ascending and g in descending.)

## B Minor Arpeggio.

RIGHT	1	2	3	1	2	3	5
	B	D	F#	B	D	F#	B
LEFT	5	4	2	1	4	2	1

## Dominant 7th Arpeggio.

RIGHT	2	3	4	1	2	3	4	1	3
	F#	A#	C#	E	F#	A#	C#	E	F#
LEFT	4	3	2	1	4	3	2	1	4

## Diminished 7th Arpeggio.

RIGHT	2	3	1	2	3	4	1	2	3
	A#	C#	E	G#	A#	C#	E	G#	A#
LEFT	4	3	2	1	4	3	2	1	4

Never use the thumb on a black key (sharp or flat) in any scale.

	F#	G#		C#	D#		F#	G#		C#	D#		F#	
			A		B				A		B		E#	
					D						D			
RIGHT Asc.	2	2	3	4	1	2	3	4	3	1	2	3	4	2
RIGHT Desc.		2	3	2	1	2	3	3	1	2	3	4	4	1
LEFT Asc.	4	4	3	2	1	3	3	2	1	4	4	3	2	1
LEFT Desc.														

(Play d# in ascending and d in descending.) (In F# minor the fingering in the right hand is different in descending, therefore follow second line of figures in descending, reading them backward.)

**F Sharp Minor Arpeggio.**

RIGHT	3	1	2	4	1	2	4
	F#	A	C#	F#	A	C#	F#

LEFT	3	1	4	2	1	4	2
RIGHT	3	1	2	3	4	1	2
	C#	E#	G#	B	C#	E#	G#

LEFT	3	1	4	3	2	1	4
RIGHT	1	2	3	4	1	2	3
	E#	G#	B	D#	E#	G#	B

LEFT	3	1	4	3	2	1	4
RIGHT	1	2	3	4	1	2	3
	E#	G#	B	D#	E#	G#	B

LEFT	5	4	3	2	1	4	3
RIGHT	1	2	3	4	1	2	3
	E#	G#	B	D#	E#	G#	B

LEFT	5	4	3	2	1	4	3
RIGHT	1	2	3	4	1	2	3
	E#	G#	B	D#	E#	G#	B



## C SHARP MINOR. (4 sharps)

Never use the thumb on a black key (sharp or flat) in any scale.

RIGHT Ascend 2 2 3 4 1 2 3 4 3 1 2 3 4 1 2 3 4 2 1 3

RIGHT Descend 2 2 3 2 1 2 3 3 1 2 3 4 4 1 2 3 3 1 2 3 3

LEFT 3 3 2 1 4 4 3 2 1 3 3 2 1 4 4 3 2 1 1 3

(Descend- ing only.)

(Descend- ing only.)

In C # minor follow same rule for right hand as in preceeding scale. (Play A # in ascending and A ♭ in descending.)

## C Sharp Minor Arpeggio.

RIGHT 3 1 2 4 1 2 4

C# E G# C# E G# C#

LEFT 3 1 4 2 1 4 2

## Dominant 7th Arpeggio.

RIGHT 3 1 2 3 4 1 2 3 4

G# B# D# F# G# B# D# F# G#

LEFT 3 1 4 3 2 1 4 3 2

## Diminished 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

B# D# F# A# B# D# F# A# B#

LEFT 5 4 3 2 1 4 3 2 1

# G SHARP MINOR. (5 sharps)

29

Never use the thumb on a black key (sharp or flat) in any scale.

	G#	A#		C#	D#		G#	A#		C#	D#			G#
			B			(Descending only.)	E	(Ascending only.)	E#	F*		B		
RIGHT	2	2	3	3	1		2	3	4	1	2	3	4	3
LEFT	3	3	2	1	4		4	3	2	1	3	3	2	1
(8va lower)														

In this scale the 7th tone is already sharp (f#) according to the signature of the scale, therefore it must be made double sharp (\*) in order to raise it a half tone. (Play e# in ascending and e in descending.)

## G Sharp Minor Arpeggio.

RIGHT	3	1	2	4	1	2	4
	G#	B	D#	G#	B	D#	G#
LEFT	3	1	4	2	1	4	2

## Dominant 7th Arpeggio.

RIGHT	3	1	2	3	4	1	2	3	4
	D#	F*	A#	C#	D#	F*	A#	C#	D#
LEFT	3	1	4	3	2	1	4	3	2

## Diminished 7th Arpeggio.

RIGHT	1	2	3	4	1	2	3	4	5
	F*	A#	C#	E#	F*	A#	C#	E#	F*
LEFT	5	4	3	2	1	4	3	2	1



## D SHARP MINOR. (6 sharps)

Never use the thumb on a black key (sharp or flat) in any scale.

RIGHT 1 3 4 1 2 3 4 3 1 2 3 4 3 1 2 3

LEFT (8va lower) 2 2 1 4 4 3 2 1 3 3 2 1 4 4 3 2 1 2 3 2

(D # minor appears also as E ♭ minor with 6 flats, the only difference is in the notation.)

## D Sharp Minor Arpeggio.

RIGHT 1 2 3 1 2 3 5

LEFT 5 4 2 1 4 2 1

## Dominant 7th Arpeggio.

RIGHT 3 1 2 3 4 1 2 3 4

LEFT 3 2 1 4 3 2 1 4 3

## Diminished 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

LEFT 5 4 3 2 1 4 3 2 1

# B FLAT MINOR. (5 flats)

31

Never use the thumb on a black key (sharp or flat) in any scale.

Descend.

(Ascending only.)

Descend.

(Ascending only.)

RIGHT

LEFT (8va lower)

1 3 3 1 2 3 4 1 2 3 4 3 1 2 3 4 1 2 3 4

2 2 1 4 4 3 2 1 3 3 2 1 4 4 3 2 1 2 3 2

2 1 2 3 2 1 3 4 3 2 1 4 3 2 1 3 4 3 2 3

B♭ minor appears also as A♯ minor with seven sharps.

The left hand fingering is different in descending, therefore read lower line of figures when descending.

## B Flat Minor Arpeggio.

RIGHT

2 3 1 2 3 1 2

B♭ D♭ F B♭ D♭ F B♭

LEFT

3 2 1 3 2 1 3

## Dominant 7th Arpeggio.

RIGHT

1 2 3 4 1 2 3 4 5

F A C E♭ F A C E♭ F

LEFT

5 4 3 2 1 4 3 2 1

## Diminished 7th Arpeggio.

RIGHT

1 2 3 4 1 2 3 4 5

A C E♭ G♭ A C E♭ G♭ A

LEFT

5 4 3 2 1 4 3 2 1



## F MINOR. (4 flats)

Never use the thumb on a black key (sharp or flat) in any scale.

RIGHT 4 1 2 3 4 3 1 2 3 4 4 1 2 3 4 4 1 2 3 4

LEFT (5va lower) 5 5 4 3 2 1 3 3 2 1 4 4 3 2 1 3 3 2 1

Labels on keyboard: A $\flat$ , B $\flat$ , D $\flat$ , C, D, E, F, G, A $\flat$ , B $\flat$ , C, D, E, F. Annotations: Descend., (Ascending only.), (Ascending only.).

(In F minor the thumb comes on f and e in both hands.)

## F Minor Arpeggio.

RIGHT 1 2 3 1 2 3 5

F	A $\flat$	C	F	A $\flat$	C	F
---	-----------	---	---	-----------	---	---

LEFT 5 4 2 1 4 2 1

## Dominant 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

C	E	G	B $\flat$	C	E	G	B $\flat$	C
---	---	---	-----------	---	---	---	-----------	---

LEFT 5 4 3 2 1 4 3 2 1

## Diminished 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

E	G	B $\flat$	D $\flat$	E	G	B $\flat$	D $\flat$	E
---	---	-----------	-----------	---	---	-----------	-----------	---

LEFT 5 4 3 2 1 4 3 2 1

# C MINOR. (3 flats)

33

Never use the thumb on a black key (sharp or flat) in any scale.)

Descend (Ascending only.)

RIGHT **3** 1 2 3 **4** 1 2 3 4 **3** 1 2 3 **5** 1 2 3 4 5

LEFT **5** 5 4 3 2 1 **3** 3 2 1 **4** 4 3 2 1 **3** 3 2 1

## C Minor Arpeggio.

RIGHT 1 2 3 1 2 3 5

C Eb G C Eb G C

LEFT 5 4 2 1 4 2 1

## Dominant 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

G B D F G B D F G

LEFT 5 4 3 2 1 4 3 2 1

## Diminished 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

B D F Ab B D F Ab B

LEFT 5 4 3 2 1 4 3 2 1



## G MINOR. (2 flats)

Never use the thumb on a black key (sharp or flat) in any scale.)

RIGHT 3 1 2 3 4 1 2 3 4 3 1 2 3 5 1 2 3 4 5

LEFT 5 5 4 3 2 1 3 3 2 1 4 4 3 2 1 3 3 2 1

(5va lower)

## G Minor Arpeggio.

RIGHT 1 2 3 1 2 3 5

G B $\flat$  D G B $\flat$  D G

LEFT 5 4 2 1 4 2 1

## Dominant 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

D F# A C D F# A C D

LEFT 5 4 3 2 1 4 3 2 1

## Diminished 7th Arpeggio.

RIGHT 3 1 2 3 4 1 2 3 4

F# A C E $\flat$  F# A C E $\flat$  F#

LEFT 3 2 1 4 3 2 1 4 3

# D MINOR. (1 flat)

35

Never use the thumb on a black key (sharp or flat) in any scale.

Descend. (Ascending only.)

RIGHT **3** 1 2 3 **4** 1 2 3 4 **3** 1 2 3 **5** 1 2 3 4 5

LEFT (8va lower) **5** 5 4 3 2 1 **3** 3 2 1 **4** 4 3 2 1 **3** 3 2 1

## D Minor Arpeggio.

RIGHT 1 2 3 1 2 3 5

LEFT 5 4 2 1 4 2 1

## Dominant 7th Arpeggio.

RIGHT 1 2 3 4 1 2 3 4 5

LEFT 5 4 3 2 1 4 3 2 1

## Diminished 7th Arpeggio.

RIGHT 3 1 2 3 4 1 2 3 4

LEFT 3 2 1 4 3 2 1 4 3



## CHROMATIC SCALE.

Never use the thumb on a black key (sharp or flat) in any scale.

	<b>D<math>\flat</math></b> <b>C<math>\sharp</math></b>	<b>E<math>\flat</math></b> <b>D<math>\sharp</math></b>		<b>G<math>\flat</math></b> <b>F<math>\sharp</math></b>	<b>A<math>\flat</math></b> <b>G<math>\sharp</math></b>	<b>B<math>\flat</math></b> <b>A<math>\sharp</math></b>		<b>D<math>\flat</math></b> <b>C<math>\sharp</math></b>	<b>E<math>\flat</math></b> <b>D<math>\sharp</math></b>		<b>G<math>\flat</math></b> <b>F<math>\sharp</math></b>	<b>A<math>\flat</math></b> <b>G<math>\sharp</math></b>	<b>B<math>\flat</math></b> <b>A<math>\sharp</math></b>		<b>D<math>\flat</math></b> <b>C<math>\sharp</math></b>
	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>A</b>	<b>B</b>	<b>C</b>
RIGHT	1 3	1 3	1	2 3	1 3	1 3	1	2 3	1 3	1	2 3	1 3	1 3	1	2 3
LEFT	1 3	1 3	2	1 3	1 3	1 3	2	1 3	1 3	2	1 3	1 3	1 3	2	1 3

(The fingering here given is the one in general use, although it may be fingered in several ways. The 3d finger comes on all black keys, right and left hand.)

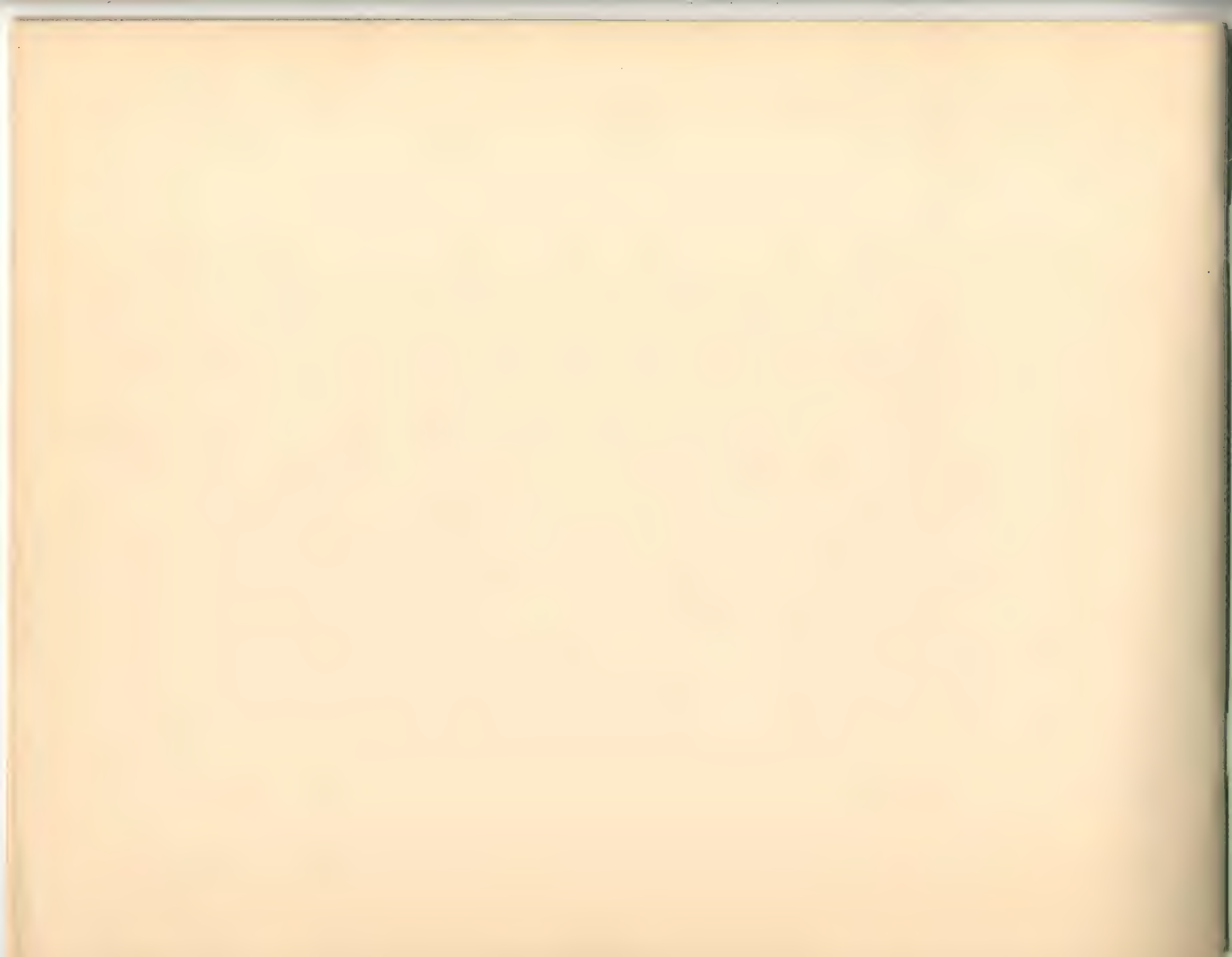
As a general review, and to gain independence between the various keys, it is advisable to practise the major and minor scales in chromatic rotation as follows:

- |  |  |  |   |
|--|--|--|---|
| 1 { C major—Natural<br>C minor—3 flats             | 4 { E flat major—3 flats<br>D sharp minor—6 sharps | 7 { F sharp major—6 sharps<br>F sharp minor—3 sharps | 10 { A major—3 sharps<br>A minor—Natural          |
| 2 { D flat major—5 flats<br>C sharp minor—4 sharps | 5 { E major—4 sharps<br>E minor—1 sharp            | 8 { G major—1 sharp<br>G minor—2 flats               | 11 { B flat major—2 flats<br>B flat minor—5 flats |
| 3 { D major—2 sharps<br>D minor—1 flat             | 6 { F major—1 flat<br>F minor—4 flats              | 9 { A flat major—4 flats<br>G sharp minor—5 sharps   | 12 { B major—5 sharps<br>B minor—2 sharps         |

In playing scales in 3rds (C major—left hand C—right hand E.  
 " 6ths " " " " E— " " C.  
 " 10ths " " " " C— " " E.—8va higher. } Use same fingering.













# PHYSICAL CULTURE

## FOR THE FINGERS, HANDS AND ARMS



Hand after four years of conscientious practice of technical exercises at the piano



The same hand six months later with training by physical culture exercises away from the instrument

Save time. Save your nerves. Develop the hands and arms away from the piano.

At the piano the mind should be concentrated on tone production, tone quality, effect and interpretation, upon the emotional, not on technical requirements.

An untrained hand is a disturbance to the mind, and generally makes a mechanical player.

We will develop a beginner's hand in half the time required by even the most conscientious practice at the instrument, and will guarantee the advanced performer a marvelous ease and freedom of technic, which he never could acquire by depending entirely upon the development of the hands at his instrument.



# EXAMINATION BLANK

---

What is your age? .....

Will you follow instructions carefully, and make exercises daily and conscientiously? .....

How long have you studied music? .....

What instrument do you play? .....

How long do you practice on an average, daily? .....

Can you play all major and minor scales and arpeggios fluently? .....

What studies have you taken? .....

How many keys can you span between thumb (or 1st) and fifth finger? .....

How many keys can you span between the thumb and second finger? .....

Can you move fourth finger freely and independently up and down (keeping other fingers and hand quiet)? .....

How many times, without tiring? .....

Do the muscles in your forearm become sore when playing octaves from the wrist? .....

Does the wrist ache or tire when playing octaves? .....

Have you difficulty in relaxing the wrist and arm during octave or chord playing? .....

Do you tire easily when practicing? .....

How long can you practice or play without tiring or aching? .....

Does your back ache after or during practice? .....

Have you difficulty in locating distances (intervals) of an octave more or less? .....

Does the fifth finger feel specially weak or lack independence? .....

Can you resist the weight of your arm falling on your fifth finger without the first joint of the finger bending? .....

Have you difficulty in keeping your fingers naturally curved when playing from the knuckles? .....

Do your fingers bend in at the first finger joint when playing with finger movement? .....

Is there any difficulty in raising the fingers up from the knuckles? .....

Can you keep your arm quiet and relaxed when playing with finger movement? .....

Can you move the thumb freely under the hand in scale and arpeggio movement? .....

Do you find it difficult to relax every muscle during playing? .....

Does the wrist feel stiff or awkward? .....

Have you difficulty in keeping the wrist up or level? .....

Have you difficulty in playing chords or octaves from elbow joint? .....

Are you conscious of a weakness of fingers, hands or arms? .....

Do your finger tips feel sore and bruised from playing? .....

Do you suffer from numbness or cold hands? .....

Do your fingers perspire? .....

Do the fingers ever feel swollen? .....

Does the fifth finger crook or curve inward? .....

What position and movement of the fingers, hands or arms do you find most difficult?

WRITE FREELY of any difficulty that you may experience.

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**MISSOURI**





# School of Physical Culture for the Fingers, Hands and Arms

A course of instruction that will meet the requirements and demands of any one who wishes to develop the fingers, hands, wrists and arms for correct performing upon the piano, violin, etc.

Every one taking this course will receive special instruction and exercises adapted to the peculiar difficulties and weaknesses of his own hands. Owing to the difference in hands, there are scarcely any two persons who can use the same exercises. Consequently exercises must be given according to individual requirements.

Many weary hours are spent at the piano in attempting to overcome some technical difficulty. The monotony of repeating the same phrase or passage, together with the nervous strain of hearing the same notes over and over, have caused many pupils to give up in despair or become nervous wrecks. The object of these lessons in "Physical Culture" for the fingers, wrists, hands and arms, is to develop the same by means of movements, etc., away from the instrument and make the performer fit to take up the technical difficulties at the instrument and master them in half the time otherwise required.

By devoting fifteen minutes of the practice hour to the proper exercises especially adapted to the performer, twice the amount of progress and far more ease in mastering the difficulties will be observed.

The complete "Anatomy of the Hand" with illustrations, will be furnished to every pupil with the first lesson, and his individual difficulties will be clearly pointed out, according to his answers on the examination blank, stating all difficulties, etc. This blank must be filled out by every pupil. He must also give accurate dimensions of the fingers and hand, as well as a sketch or drawing of same.

Having taught music for many years, I have experienced the same difficulty that every teacher of music encounters. The drudgery of technic often causes a pupil to give up in despair, and at best tries his patience severely. In order to relieve the strain of technical development, the composers and publishers of technical works have presented everything in the most interesting manner. Still it is extremely hard for most pupils to persevere in this branch of development. Many exercises for the fingers cannot be relieved of their monotony; therefore,



it is very trying on the nerves to give the fingers the required amount of exercise.

After numerous tests and a thorough study of the matter, I have found that many exercises intended for the development of certain fingers, really do not reach the source of the difficulty, or require such a great amount of monotonous practice that the pupil will naturally become nervous and discouraged.

Take for example, the fourth and fifth fingers only. Have you ever stopped to think how these two fingers are naturally and generally neglected?

In the general use of the hand, such as taking hold of anything, in carrying objects, in writing, in handling tools—in fact, wherever there is a call for the use of the hand, the thumb, second and third fingers do it all, and the fourth and fifth fingers are hardly used.

Now, we expect these unexercised fingers to do as much and more than the other fingers in exercises for technic on instruments like the piano, violin, etc. It may readily be seen that these fingers require special assistance, and must be given special exercise for development away from the piano. This will save hours of wearisome practice and hasten the progress, as the exercises are indispensable for the development of the fingers, the hands and the arms.

Every part of the human body, except the fingers and hands, is being developed by various systems of physical culture.

Unless they are specially exercised, the transverse ligaments of the hand remain quiet and stiff and impede the movements of the muscles. By physical culture exercises, the ligaments connecting the bones of the middle hand among themselves and with the fingers, are extended and stretched, by which these joints, so important in playing on musical instruments, are made flexible. (See illustration.)

The connecting links between the bones of the middle hand and the wrist are loosened.

All the ligaments of the cavity of the hand are made flexible. All the muscles of the hand, and especially those situated between the bones (generally so little exercised), are stirred into activity. Convince yourself of these facts by studying the diagrams of the hand and the parts alluded to—the neglected movement of the middle hand and bones of the wrist, the small, tight ligaments between the knuckles and those of the hand. The wrist, especially, becomes flexible and strong by these exercises. Flexibility, agility and strength can only be acquired by special exercises in stretching, extending, pressing and training the muscles, ligaments and limbs.

The principal difficulty in playing a musical instrument does not consist in reading music, but in the awkwardness and weakness of the untrained, undeveloped fingers, etc.

The fingers cannot respond to the mind in a quick and easy manner unless they are previously trained.

The rendition of good music is an art which makes the greatest demand on the muscles, etc., of the fingers—moving them up and down and expanding them according to the various requirements of a composition.

The difficulty in beginning technical work on any musical instrument is:

1st.—The muscles, ligaments and tendons of the hand and fingers are least exercised, therefore, the weakest.

2nd.—They have never received physical culture exercises.

3rd.—The practice at the instrument alone for the purpose of strengthening the weak and neglected muscles and making them flexible is insufficient and often erroneous.

4th.—The transverse ligaments have never been stretched and are, therefore, placed under unnatural strain.

As soon as the muscles are properly and gymnastically exercised and the ligaments and tendons stretched, the fingers are set at liberty, and are given the faculty of moving freely over the instrument.

The more the hand is physically developed, the better the touch becomes. Remember no two persons' hands are alike; therefore, everyone has his own, individual difficulties to contend with. In presenting this course of lessons to the public, we submit a complete course of seventy exercises with the first lesson and adapt these exercises specially to every individual's requirements.

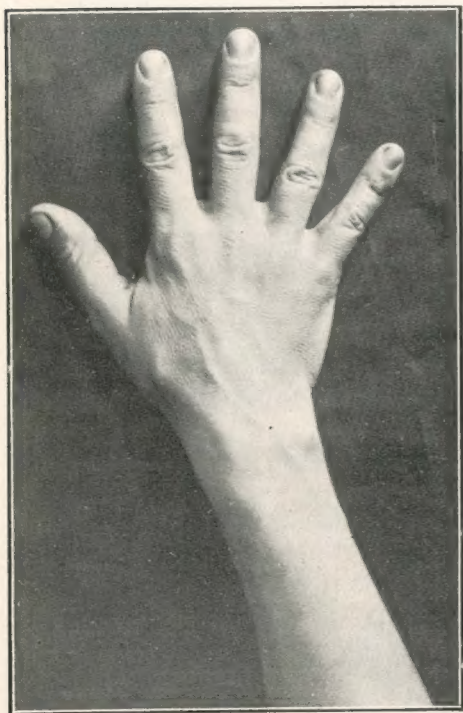
We show you how to make a drawing or outline of your hands and fingers, finger-joints, etc., and give you the various test movements, questions, etc., to locate thoroughly your particular difficulty, and then prepare the exercises especially for you.

In a very short time you will observe wonderful results, and simplify your technical work in such a manner that it will become a pleasure, and not a nerve-trying drudgery. Your touch will improve rapidly and your performing will seem like **play** and not like work.

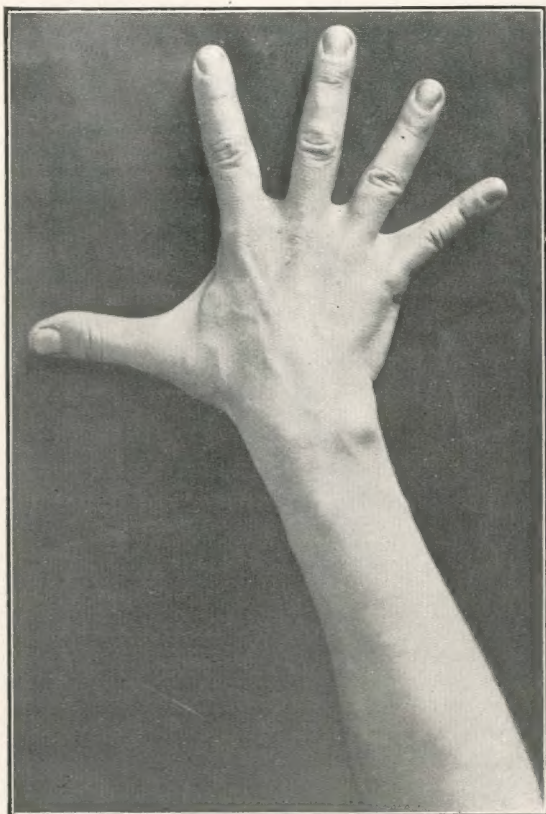
We positively guarantee to make your fingers independent; to make your fourth finger as flexible as your other fingers; to expand your hand so that you can reach three or four notes over the octave. We will loosen your wrists so as to make octave playing a pleasure. We will



give you freedom of movement in every muscle and joint from shoulder to finger tip. We will put new life into the nerves and arteries and make your fingers, hands and arms, flexible and strong.



Hand after four years of conscientious practice of technical exercises at the piano



The same hand six months later with training by physical culture exercises away from the instrument

Information on any musical subject will be cheerfully given during the course of these "physical culture" exercises. Anything relating to certain modes of playing (a branch of technic, touch, expression, interpretation, harmony, composition, methods, memorizing, sight-reading, pedal, etc., etc.) also receive strict attention.

For full particulars, address or apply to

**THE LAMANO SUPPLY COMPANY**

(PUBLISHING DEPARTMENT)

SAINT CHARLES

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